The impact of ChatGPT on blended learning: Current trends and future research directions

Abstract

Designing sustainable and scalable educational systems is a challenge. Artificial Intelligence (AI) offers promising solutions to enhance the effectiveness and sustainability of blended learning systems. This research paper focuses on the integration of the Chat Generative Pre-trained Transformer (ChatGPT), with a blended learning system. The objectives of this study are to investigate the potential of AI techniques in enhancing the sustainability of educational systems, explore the use of ChatGPT to personalize the learning experience and improve engagement, and propose a model for sustainable learning that incorporates AI. The study aims to contribute to the body of knowledge on AI applications for sustainable education, identify best practices for integrating AI in education, and provide insights for policymakers and educators on the benefits of AI in education delivery. The study emphasizes the significance of AI in sustainable education by addressing personalized learning and educational accessibility. By automating administrative tasks and optimizing content delivery, AI can enhance educational accessibility and promote inclusive and equitable education. The study's findings highlight the potential benefits of integrating AI chatbots like ChatGPT into education. Such benefits include promoting student engagement, motivation, and self-directed learning through immediate feedback and assistance. The research provides valuable guidance for educators, policymakers, and instructional designers who seek to effectively leverage AI technology in education. In conclusion, the study recommends directions for future research in order to maximize the benefits of integrating ChatGPT into learning systems. Positive results have been observed, including improved learning outcomes, enhanced student engagement, and personalized learning experiences. Through advancing the utilization of AI tools like ChatGPT, blended learning systems can be made more sustainable, efficient, and accessible for learners worldwide.